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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,685	11/07/2001	Jeremy Barker	VT-2230CPC	2404
33204	7590	11/02/2004	EXAMINER	
VALENCE TECHNOLOGY, INC. 301 CONESTOGA WAY HENDERSON, NV 89015			CHANEY, CAROL DIANE	
			ART UNIT	PAPER NUMBER

1745

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/045,685

Applicant(s)

BARKER ET AL.

Examiner

Carol Chaney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 101-153 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 101-109, 116-134 and 141-153 is/are rejected.
- 7) ☒ Claim(s) 110-115 and 135-140 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 101-109, 116-134, and 141-153 are rejected under 35 U.S.C. 102(b) as being anticipated by Shackle, US Patent 5,721,070 for reasons of record.

The previous rejection is repeated below for convenience:

Shackle discloses electrode active cathode materials used in lithium nonaqueous batteries. The battery compositions are represented by the formula



where

'M' is an alkali metal ion

'T' is a metal ion capable of existing in more than one stable oxidation state selected from Mn, Ni, Fe, V, Ti, Co, Cu, Cr, Sn, Pb, W, and Mo.

'A' is a multi-element anion with a charge greater than 1.0 and selected from SiO_4 , TiO_4 , VO_4 , FeO_4 , MnO_4 , and PO_4 .

(See column 3 line 61-column 4 line 36.)

'x' is between 1 and 20, 'y' is between 1 and 4, and

z is from 1 to about 7.

(See column 8, lines 19-23.)

In addition, in some embodiments, further anions are added into the electrode active material compound to alter electrical conductivity. Typical added anions include

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F- and OH-. (See column 4, line 63-column 5, line 3.) Thus, lithium metal phosphates having hydroxide or fluoride anions are disclosed by Shackle as electroactive cathode materials, and batteries using the materials are taught by Shackle. (Column 5, lines 19-30.)

Allowable Subject Matter

Claims 110-115 and 135-140 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to provide one of ordinary skill in the art with motivation to incorporate two cations in place of the metal ion 'T' in the structure $M_xT_yA_z$.

Response to Arguments

Applicant's arguments filed 20 August 2004 have been fully considered but they are not persuasive.

Applicants assert the electrode active materials recited in claims 101-109, 116-134 and 141-153 could not be envisaged by one of ordinary skill in the art based upon the teachings of the Shackle '070 reference. In response, it is noted that the compounds $A_aM_b(PO_4)_3Z_d$ recited by the applicants are identical to the compounds $M_xT_yA_z$ disclosed by Shackle for the instances where A is PO_4 , one of only six anions specifically listed by Shackle as useful in his invention, (see column 4, lines 46-49). The

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compound stoichiometry recited by the applicants' would be easily envisioned by one of ordinary skill in the art based upon the Shackle invention. One of ordinary skill in the art would be familiar with compounds of the formula $M_xT_yA_z$ with $A = PO_4$ and $z=3$ as evidenced by the publications cited in the Shackle patent. The addition of halogens or hydroxide ions are specifically taught to alter such properties as electronic conductivity. (see Shackle column 4, line 63-column 5, line 3) and thus one of ordinary skill in the art is provided with reasons and benefits for using such additives. The amount of "picking and choosing" from the '070 reference required to obtain applicants' invention is thus actually quite limited, and one of ordinary skill in the art could easily envisage applicants' invention from the Shackle invention.

Conclusion


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (571) 272-1284. The examiner can normally be reached on Mon - Fri 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Carol Chaney
Primary Examiner
Art Unit 1745

1 November 2004